

# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

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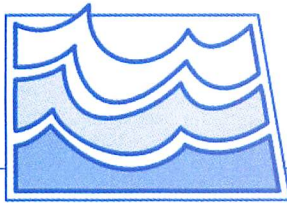
## **NOTICE OF MEETING**

The North Dakota State Water Commission and the State Water Commission Policy Committee will hold meetings on February 9, 2016, at 2:00 p.m., Central Standard Time (the policy committee meeting will convene immediately following the State Water Commission meeting). The meetings will be held in the lower level conference room at the State Office Building, 900 East Boulevard Avenue, Bismarck, North Dakota.

At the time this notice is being prepared, the North Dakota State Water Commission and the State Water Commission policy committee anticipates the agendas of its meetings to include those topics as listed on the agendas. The discussion of agenda topics, where noted, may be held in executive session rather than during the portion of the meeting which is open to the public.

*Date of Notice:* February 2, 2016

*Contact:* Sharon Locken  
Administrative Staff Officer  
North Dakota State Water Commission  
900 East Boulevard Avenue  
Bismarck, ND 58505  
701.328.4940  
Email: [slocken@nd.gov](mailto:slocken@nd.gov)



# North Dakota State Water Commission

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**State Office Building  
Lower Level Conference Room  
Bismarck, North Dakota**

**February 9, 2016 - 2:00 P.M. (Central Time)**

## AGENDA

- A. Roll Call
- B. Consideration of Agenda
- C. **Northwest Area Water Supply Project - Biota Water Treatment Plant Design Memorandum of Understanding** \*\*
- D. Other Business
- E. Adjournment

**\*\* BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION**

To provide telephone accessibility to the State Water Commission meeting and the State Water Commission policy meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

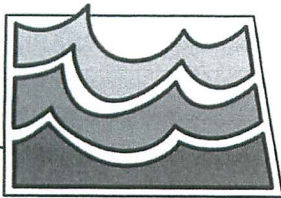
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**North Dakota State Water Commission  
Cost Share Policy Committee  
(Immediately Following State Water Commission Meeting)**

## AGENDA

- 1. Roll Call
- 2. Consideration of Agenda
- 3. Capital Improvement Fund
  - a. 2015 Senate Bill 2020 – Section 33
  - b. Water System Reserve Funding Survey
  - c. Example Spreadsheet Format
  - d. Potential Approach
  - e. **Specific Cost Share Policy Changes**
    - i. Regular Maintenance Definition
    - ii. Extraordinary Maintenance Definition
    - iii. Sustainable Operation, Maintenance, and Replacement Plan
    - iv. Capital Improvement Fund Definition
- 4. Water Supply
  - a. Improvements vs Expansion Projects
  - b. **Specific Cost Share Policy Changes**
- 5. Other Definitions
  - a. Permit Costs
  - b. Other Ineligible Items
  - c. **Specific Cost Share Policy Changes**
- 6. Regionalization
  - a. System Capacity Buy-in Funding
  - b. Existing Water System Debt Buy-down Credit
- 7. **Water Plan Prioritization**
- 8. Other Business
- 9. Adjournment






# North Dakota State Water Commission

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*State Water Commission  
Meeting - Agenda C*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:**  Todd Sando, P.E., Chief Engineer-Secretary  
**SUBJECT:** NAWS – Biota WTP Design MOU  
**DATE:** January 27, 2016

The Northwest Area Water Supply Project (NAWS) litigation schedule has been finalized and accepted by the District of Columbia district court. Included in the filing schedule is a Motion to Modify Injunction *pendente lite* to be filed March 1, 2016 by the State of North Dakota through the State Water Commission as Defendant-Intervenor. The purpose of the modification of the injunction is to allow design work and pre-construction (surveys, geotechnical work, etc) activities to commence on the NAWS Biota Water Treatment Plant prior to the injunction being permanently lifted or the litigation being otherwise resolved due to the anticipated length of time required for the design of the facility in question. Estimates from our consultant engineer put the design cost at roughly \$5 million and the design time at 86 weeks. Legal counsel for the parties have indicated a memorandum of understanding (MOU) covering the intent of both the defendant and defendant-intervenor and their respective roles is necessary prior to the motion being filed with the court. The proposed MOU is attached. The State is committing to funding the design and pre-construction activity, taking place between the time the injunction is modified and the time the injunction is permanently lifted, with state and local funds and not requesting federal reimbursement or cost-share credit. Any design and pre-construction activity, after the injunction is permanently lifted or litigation is otherwise resolved, would be eligible for federal cost share. The Bureau of Reclamation will be involved in the design due to the federal responsibility to ensure compliance with the Record of Decision and Boundary Water Treaty Act.

**I recommend the State Water Commission approve and authorize the Chief Engineer/Secretary to execute the Memorandum of Understanding Between the State of North Dakota and the Bureau of Reclamation With respect to Design and Pre-Construction of the Northwest Area Water Supply Biota Water Treatment Plant.**

TJF/237-04

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY

Draft Memorandum of Understanding Between the  
State of North Dakota and the Bureau of Reclamation  
With respect to Design and Pre-Construction of the Northwest Area Water Supply  
(NAWS) Biota Water Treatment Plant

The parties to this agreement are the State of North Dakota, represented by the Garrison Diversion Conservancy District and the North Dakota State Water Commission (State) and the Bureau of Reclamation (Reclamation). The Parties mutually agree that:

- In accordance with the Dakota Water Resources Act of 2000, Reclamation has responsibilities to meet the requirements of the Boundary Waters Treaty Act (Treaty) and for construction, operation, maintenance, and replacement of water treatment and related facilities attributable to meeting the requirements of the Treaty.
- Reclamation is also responsible for assuring compliance with the Record of Decision (dated August 21, 2015) and Final Supplemental EIS for the NAWS project.
- Design and pre-construction activities of systems and facilities within the NAWS Biota Water Treatment Plant (WTP) relating to Treaty and Record of Decision compliance will be subject to additional review and further participation by Reclamation beyond that required under Cooperative Agreement No. R12AC60014 for the Construction of the ND State MR&I Program.
- NAWS construction is currently enjoined by a federal court order originally issued in 2005 and modified most recently on March 1, 2013 (NAWS injunction). The State intends to seek permission from the court to undertake design work for the Biota WTP during the pendency of the NAWS injunction.
- Should the court grant the State permission to undertake design work for the Biota WTP, the State will use only State and Local funds and will assume all financial responsibility associated with this work until the NAWS injunction is lifted or the litigation is otherwise resolved.
- The State will not, at any time in the future, seek federal reimbursement for the cost of the design and preconstruction activities for the Biota WTP performed before the NAWS injunction is lifted or the litigation is otherwise resolved. The State expects Reclamation to resume its role as a cost share partner once the NAWS injunction is lifted or the litigation is otherwise resolved.
- Reclamation and the State will follow the review and approval process associated with Cooperative Agreement No. R12AC60014 for all of this work, including the additional reviews and studies listed below to assure that all design and pre-construction activities taking place after the injunction is lifted or litigation otherwise resolved would be allowable, allocable, and reasonable.

- The State will provide the scope of work, 30%, 60%, 90%, and final designs for Reclamation's review and approval. The State and Reclamation will participate in design meetings with the State's selected consulting firm(s) performing the designs.
- The State will participate with Reclamation to complete Value Studies and Design, Estimating, and Construction reviews as required by Reclamation policy prior to final design.
- The State and Reclamation intend to enter into cooperative agreement(s) that define the roles and responsibilities for the construction and operation and maintenance phases of the Biota WTP.

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Duane DeKrey  
General Manager  
Garrison Diversion  
Conservancy District

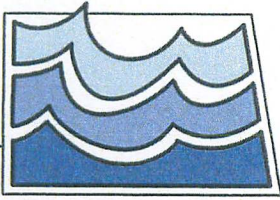
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Todd Sando  
Chief Engineer/Secretary  
North Dakota State  
Water Commission

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David Rosenkrance  
Dakotas Area Manager  
Bureau of Reclamation





# North Dakota State Water Commission

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*Policy Committee Meeting*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd Sando, P.E., Chief Engineer-Secretary  
**SUBJECT:** Cost-Share Policy  
**DATE:** February 1, 2016

This memo provides an explanation of cost-share policy changes submitted for your consideration.

### Capital Improvement Funds and Sustainable Infrastructure

The 2015 Senate Bill 2020, Section 33, included a requirement for a project sponsor to have a capital improvement fund as a condition of funding extraordinary maintenance projects. The specific language states:

*The commission shall require a water project sponsor to maintain a capital improvement fund from the rates charged customers for future extraordinary maintenance projects as a condition of funding an extraordinary maintenance project.*

The intent is that the following changes bring our cost share policy in compliance with Section 33 of Senate Bill 2020 and provide a framework for implementation. The desire is to have project sponsors provide a plan for long-term maintenance and replacement of the extraordinary maintenance projects that were completed with assistance from state cost share funding.

In an effort to provide differentiation between extraordinary and regular maintenance, definitions for regular and extraordinary maintenance costs are proposed:

***Regular Maintenance Costs** include repairs, deferred repairs, and general upkeep of facilities to allow facilities to continue proper operation and function.*

***Extraordinary Maintenance Costs** include the repair of portions of facilities or components that extends the overall life of the system or component that are above and beyond regular or normal maintenance.*

Our existing cost share policy currently requires a Sustainable Operation, Maintenance and Replacement Plan for requests for cost share assistance. We are proposing adding the following language to that plan's current definition:

*...For projects involving extraordinary maintenance on a water supply system, a summary of the project sponsor's Capital Improvement Fund must also be included.*

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY

Also proposed is a definition for Capital Improvement Fund as follows:

*Capital Improvement Fund is money set aside using a portion of user fees for future maintenance, and a cost share application shall include documentation of the following:*

- 1. Current capital improvement fund balance*
- 2. Existing and new assets*
- 3. Replacement cost of assets*
- 4. Average life of assets*
- 5. Current and future monthly reserve per user*

We created a spreadsheet that provides a simplified approach to quantifying and documenting a system's Capital Improvement Fund, and it is our intent to provide that spreadsheet to local sponsors as an example of the type of information we intend to require. They will not be bound to using that spreadsheet specifically, but can do so if they prefer.

The anticipated timeline for acclimation of the capital improvement funds must consider the asset's replacement cost, average life expectancy in years, and current system capital improvement funds. Typically, a system would finance a portion of the large extraordinary maintenance projects in order to better manage system rates and avoid acclimation of an enormous reserve fund. Attached is an example spreadsheet for determining the water rates within Capital Improvement Plans for your consideration.

We intend this as a starting point. Issues that will remain to be discussed, once we've gathered this level of information, will include outlining an appropriate timeline to accumulate capital improvement funds, specifying whether funds cover only the funded improvement or system wide assets, and whether future cost-share assistance would be restricted for those project sponsors that are non-compliant.

Future cost-share assistance could be provided to those systems with reserve funds being accumulated at an appropriate rate. Non-compliant system's cost-share percent could be reduced. Another option would include setting a minimum water rate to allow eligibility of grant funding. If there are other options that the Commissioners would want to explore, we are open to developing information on other options.

### **Water Supply Improvements versus Expansions**

Cost-share policy defines improvements of projects that increase system efficiencies or output capacity versus an expansion which increases the project area or users served. Current cost share recommendations have included improvements related to recent expansions as part of the system expansion. Currently rural system improvements, not related to recent expansions, are not specifically addressed in cost-share policy. Therefore, the following changes are recommended for Section B-1:

- (1) In most cases a 75% cost-share is intended to address improvements to meet primary drinking water standards or expansion into new rural water service areas. Factors considered include:
- (a) Connection of communities to the regional system as part of this expansion as determined by the Chief Engineer.
  - (b) Willingness of water users at far reaches of the system to pay additional costs for water service as an indicator of greater need for access to water and local commitment in the project as determined by the Chief Engineer.
  - (c) Affordable and sustainable water rate as determined by the Chief Engineer.

Lower rates of cost-share up to 60% may be made available to address other necessary improvements in rural water systems.

### **Administrative, Easement, and Permit Costs**

Cost-share policy states ineligible items include “permit related costs”, however on page 5, under pre-construction costs, the policy states that engineering design to develop plans and specifications for permitting is eligible.

The recommendation is to remove the inconsistency and make permit costs eligible by removing “permit related costs” under the ineligible items section.

### **Regionalization System Capacity Buy-in Funding**

Along with a request to raise pre-construction engineering cost share from 35% to whatever cost share percentage is ultimately provided for construction and a request to raise the overall grant and loan cap from 80% to 100%, Gordon Johnson, Northeast Regional Water District Manager, has inquired whether cost share assistance will be available to fund a required capacity “buy-in” to the City of Devils Lake Water Supply and Treatment Infrastructure. The original cost to the City of Devils Lake about seven years ago was \$18 Million which was funded by a 50% federal grant and a 25% state grant.

### **Regionalization Existing Water System Debt Buy-down Credit**

The City of Cando is interested in joining the Northeast Regional Water District Devils Lake Water Supply Project but has 15 years remaining to pay on the debt of \$2 Million on their existing water treatment plant. They would like to join the current project, and have asked if the State Water Commission could pay off their \$2 Million debt to facilitate this regionalization.

### **SWC Project Prioritization Guidance**

Also attached to this memo are suggested changes to the SWC Project Prioritization Guidance policy. Key points of interest include specifying that water supply regionalization projects are of high priority; and a footnote was added to provide the Commission with



flexibility to prioritize various types of studies, analyses, models, etc. as higher priorities if the related project is of higher priority. The remaining modifications are minor wording changes.

TS:jm/1753

# CAPITAL IMPROVEMENT PLAN (CIP)

System: City  
Date: 01/29/16

Population:	3,000	Monthly Ave Per User Gallons
Users:	1,200	5,000

ASSET	UNIT COST	QTY	REPLACEMENT COST	AVERAGE LIFE (YRS)	PERCENT OF REPLACEMENT	RESERVE	ANNUAL RESERVE	MONTHLY RESERVE	MONTHLY RESERVE PER CUSTOMER	MONTHLY RESERVE PER 1,000 GAL
<b>Existing Projects</b>										
Reservoir and Pump Station	\$700,000	1	\$700,000	30	70%	\$490,000	\$16,333	\$1,361	\$1.13	\$0.23
6" Transmission Line	\$20.00	20,000	\$400,000	40	70%	\$280,000	\$7,000	\$583	\$0.49	\$0.10
Water Storage Reservoir	\$1,000,000.00	1	\$1,000,000	60	70%	\$700,000	\$11,667	\$972	\$0.81	\$0.16
SUBTOTAL Existing CIP Costs			\$2,100,000			\$1,470,000	\$35,000	\$2,917	\$2.43	\$0.49

<b>New Projects</b>										
Water Treatment Plant	\$3,000,000	1	\$3,000,000	40	70%	\$2,100,000	\$75,000	\$6,250	\$5.21	\$1.04
SUBTOTAL New CIP Costs			\$3,000,000			\$2,100,000	\$75,000	\$6,250	\$5.21	\$1.04

TOTAL Existing and New Project CIP			\$5,100,000			\$3,570,000	\$110,000	\$9,167	\$7.64	\$1.53
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TOTAL RESERVE	
Current:	\$600,000
Adjustment:	\$3,570,000

ANNUAL RESERVE	MONTHLY RESERVE	MONTHLY RESERVE PER CUSTOMER	RESERVE PER 1,000 GALLONS
\$36,000	\$3,000	\$2.50	\$0.50
\$74,000	\$6,167	\$5.14	\$1.03

Report Prepared by (Title): \_\_\_\_\_  
Date: \_\_\_\_\_

Notes:

# NORTH DAKOTA STATE WATER COMMISSION

## COST-SHARE POLICY, PROCEDURE, AND GENERAL REQUIREMENTS

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The State Water Commission has adopted this policy to support local sponsors in development of sustainable water related projects in North Dakota. This policy reflects the State Water Commission's cost-share priorities and provides basic requirements for all projects considered for prioritization during the agency's budgeting process. Projects and studies that receive cost-share funding from the agency's appropriated funds are consistent with the public interest. The State Water Commission values and relies on local sponsors and their participation to assure on-the-ground support for projects and prudent expenditure of funding for evaluations and project construction. It is the policy of the State Water Commission that only the items described in this document will be eligible for cost-share upon approval by the State Water Commission, unless specifically authorized by State Water Commission action.

### **I. DEFINITIONS AND ELIGIBILITY**

- A. CONSTRUCTION COSTS** include earthwork, concrete, mobilization and demobilization, dewatering, materials, seeding, rip-rap, crop damages, re-routing electrical transmission lines, moving storm and sanitary sewer system and other underground utilities and conveyance systems affected by construction, mitigation required by law related to the construction contract, irrigation supply works, and other items and services provided by the contractor. Construction costs are only eligible for cost-share if incurred after State Water Commission approval and if the local sponsor has complied with North Dakota Century Code (N.D.C.C.) in soliciting and awarding bids and contracts, and complied with all applicable federal, state, and local laws.
- B. COST-SHARE** is grant or loan funds provided through the State Water Commission.
- C. ENGINEERING SERVICES** include pre-construction and construction engineering. Pre-construction engineering is the engineering necessary to develop plans and specifications for permitting and construction of a project including preliminary and final design, material testing, flood insurance studies, hydraulic models, and geotechnical investigations. Construction engineering is the engineering necessary to build the project designed in the pre-construction phase including construction contract management, and project inspection. Administrative and support services not specific to the approved project are not engineering services. Engineering services are eligible costs if incurred after State Water Commission approval. If cost-share is expected to be greater than \$25,000, the local sponsor must follow the engineering selection process in NDCC 54-44.7 and provide a copy of the selection committee report to the Chief Engineer. The local sponsor will be considered to have complied with this requirement if they have completed this

selection process for a general engineering services agreement at least once every three years and have formally assigned work to a firm or firms under an agreement. The local sponsor must inform the Chief Engineer of any change in the provider of general engineering services.

- D. **IMPROVEMENTS** are construction related projects that upgrade a facility to provide increased efficiency or capacity. Improvements do not include any activities that are maintenance, replacement, or reconstruction.

- E. **INELIGIBLE ITEMS** excluded from cost-share include:

- 1 Administrative ~~and~~ easement ~~costs~~;
- 2 Property acquisitions, property surveys, and legal expenses unless specifically identified as eligible within the Flood Recovery Property Acquisition Program, the Flood Protection Program, or the Water Retention Projects;
- 3 Work and costs incurred prior to a cost-share approval date, except for emergencies as determined by the Chief Engineer;
- 4 Project related operation ~~and regular~~ maintenance;
- 5 Funding contributions provided by federal, other state, or other North Dakota state entities that supplant costs;
- 6 Work incurred outside the scope of the approved study or project.

Deleted: , and permit related

Deleted: replacement, and reconstruction costs

- F. **EXPANSIONS** are construction related projects that increase the project area or users served. Expansions do not include maintenance, replacement, or reconstruction activities.

- G. **LOCAL SPONSOR** is the entity submitting a cost-share application and must be a political subdivision, state entity, or commission legislatively granted North Dakota recognition that applies the necessary local share of funding to match State Water Commission cost-share. They provide direction for studies and projects, public point of contact for communication on public benefits and local concerns, and acquire necessary permits and rights-of-way.

- H. **REGULAR MAINTENANCE COSTS** include repairs, deferred repairs, and general upkeep of facilities to allow facilities to continue proper operation and function.

- I. **PROGRAM** is a subcategory of cost-share that is typically associated with a federal initiative and may cover all phases of a study or implementation of a project.

- J. **PROJECT** is the water-related construction activity.

- K. **EXTRAORDINARY MAINTENANCE COSTS** include the ~~repair~~ of portions of facilities or components that ~~extends the overall life of the system or component that are above and beyond regular or normal maintenance.~~

Deleted: REPLACEMENT AND RECONSTRUCTION

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Deleted: have completed their useful life and substitution with different components to obtain the same or similar function of the original facilities or components.



- L. SUSTAINABLE OPERATION, MAINTENANCE, AND REPLACEMENT PLAN** is a description of the anticipated operation, maintenance, and replacement costs with a statement that the operation, maintenance, and replacement of the project will be sustainable by the local sponsor. For water supply projects, a summary of the project sponsor's Capital Improvement Fund must also be included.

**Deleted:** involving extraordinary maintenance on a water supply system

- M. CAPITAL IMPROVEMENT FUND** is money set aside using a portion of user fees for future maintenance, and a cost share application shall include documentation of the following:

1. Current capital improvement fund balance
2. Existing and new assets
3. Replacement cost of assets
4. Average life of assets
5. Current and future monthly reserve per user

**II. COST-SHARE APPLICATION AND APPROVAL PROCEDURES.** The State Water Commission will not consider any cost-share applications for water related projects or studies unless the local sponsor first makes an application to the Chief Engineer. No funds will be used in violation of Article X, § 18 of the North Dakota Constitution (Anti-Gift Clause).

- A. APPLICATION REQUIRED.** An application for cost-share is required in all cases and must be submitted by the local sponsor on the State Water Commission Cost-Share Application form. Applications for cost-share are accepted at any time. Applications received less than 30 days before a State Water Commission meeting will not be considered at that meeting and will be held for consideration at a future meeting. The application form is maintained and updated by the Chief Engineer and must include the following:

- 1 Category of cost-share activity
- 2 Location of the proposed project or study area
- 3 Description, purpose, goal, objective, narrative of the proposed activities
- 4 Delineation of costs
- 5 Potential federal, other state, or other North Dakota state entity participation
- 6 Engineering plans, if applicable
- 7 Status of required permitting
- 8 Potential territorial service area conflicts or service area agreements, if applicable
- 9 Sustainable operation, maintenance, and replacement plan for projects
- 10 Additional information as deemed appropriate by the Chief Engineer

Applications for cost-share are separate and distinct from the State Water Commission biennial project information collection effort that is part of the budgeting process and published as the State Water Plan. All local sponsors are encouraged to submit project and study financial needs for the State Water Plan. Projects and studies not submitted as part of the State Water Plan development process may be held until action can be taken on those that were included during

budgeting, unless determined to be an emergency that directly impacts human health and safety or that are a direct result of a natural disaster.

- B. PRE-APPLICATION.** A pre-application process is allowed for cost-share of assessment projects. This process will require the local sponsor to submit a brief narrative of the project, preliminary designs, and a delineation of costs. The Chief Engineer will then review the material presented, make a determination of project eligibility, and estimate the cost-share funding the project may anticipate receiving. A project eligibility letter will then be sent to the local sponsor noting the percent of cost-share assistance that may be expected on eligible items as well as listing those items that are not considered to be eligible costs. In addition, the project eligibility letter will state that the Chief Engineer will recommend approval when all cost-share requirements are addressed. The local sponsor may use the project eligibility letter to develop a project budget for use in the assessment voting process. Upon completion of the assessment vote and all other requirements an application for cost-share can be submitted.
- C. REVIEW.** Upon receiving an application for cost-share, the Chief Engineer will review the application and accompanying information. If the Chief Engineer is satisfied that the proposal meets all requirements, the Chief Engineer will present the application along with a recommendation to the State Water Commission for its action. The Chief Engineer's review of the application will include the following items and any other considerations that the Chief Engineer deems necessary and appropriate.
- 1 Applicable engineering plans;
  - 2 Field inspection, if deemed necessary by the Chief Engineer;
  - 3 The percent and limit of proposed cost-share determined by category of cost-share activity and eligible expenses;
  - 4 Assurance of sustainable operation, maintenance, and replacement of project facilities by the local sponsor;
  - 5 Status of permitting and service area agreements;
  - 6 Available funding in the State Water Commission budget, if in the State Water Plan, and a priority ranking when appropriate.

For cost-share applications over \$100 million, additional information requested by the State Water Commission will be used to determine cost-share.

The Chief Engineer is authorized to approve cost-share up to \$75,000 in state funds and also approve cost overruns up to \$75,000 in state funds without State Water Commission action.

- D. NOTICE.** The Chief Engineer will give notice to local sponsors when their application for cost-share is placed on the tentative agenda of the State Water Commission's next meeting.
- E. AGREEMENT AND DISTRIBUTION OF FUNDS.** No funds will be disbursed until the State Water Commission and local sponsor have entered into an agreement

for cost-share participation. No agreement for construction funding will be entered into until all required State Engineer permits have been acquired.

For construction projects, the agreement will address indemnification and vicarious liability language. The local sponsor must require that the local sponsor and the state be made an additional insured on the contractor's commercial general liability policy including any excess policies, to the extent applicable. The levels and types of insurance required in any contract must be reviewed and agreed to by the Chief Engineer. The local sponsor may not agree to any provision that indemnifies or limits the liability of a contractor.

For any property acquisition, the agreement will specify that if the property is later sold, the local sponsor is required to reimburse the Commission the percent of sale price equal to the percent of original cost-share.

The Chief Engineer may make partial payment of cost-sharing funds as deemed appropriate. Upon notice by the local sponsor that all work or construction has been completed, the Chief Engineer may conduct a final field inspection. If the Chief Engineer is satisfied that the work has been completed in accordance with the agreement, the final payment will be disbursed to the local sponsor, less any partial payment previously made.

- F. **LITIGATION.** If a project submitted for cost-share is the subject of litigation, the application may be deferred until the litigation is resolved. If a project approved for cost-share becomes the subject of litigation before all funds have been disbursed, the Chief Engineer may withhold funds until the litigation is resolved. Litigation for this policy is defined as legal action that would materially affect the ability of the local sponsor to construct the project; that would delay construction such that the authorized funds could not be spent; or is between political subdivisions related to the project.

**III. COST-SHARE CATEGORIES.** The State Water Commission supports the following categories of projects and studies for cost-share. Engineering expenses related to construction are cost-shared at the same percent as the construction costs when approved by the State Water Commission.

- A. **PRE-CONSTRUCTION EXPENSES.** The State Water Commission supports local sponsor development of feasibility studies, engineering designs, and mapping as part of pre-construction activities to develop support for projects within this cost-share policy. Pre-construction expenses approved by the State Water Commission are cost-shared up to 35 percent. The following projects and studies are eligible.
- 1 Feasibility studies to identify water related problems, evaluate options to solve or alleviate the problems based on technical and financial feasibility, and provide recommendation and cost estimate, of the best option to pursue.
  - 2 Engineering design to develop plans and specifications for permitting and construction of a project, including associated cultural resource and archeological studies.

- 3 Mapping and surveying to gather data for a specific task such as flood insurance studies and flood plain mapping, LiDAR acquisition, and flood imagery attainment, which are valuable to managing water resources.

Copies of the deliverables must be provided to the Chief Engineer upon completion. The Chief Engineer will determine the payment schedule and interim progress report requirements.

## B. WATER SUPPLY

- 1 **WATER SUPPLY PROJECT.** The State Water Commission supports water supply efforts and will use a grant and loan program. The local sponsor may apply for water supply funding, and the application will be reviewed to determine project priority. Projects within category (1) may be considered for grant funding up to 75 percent cost-share. Projects in category (2) may be considered for grant funding up to 60 percent of cost-share. Grant funding within category (3) will be on a case-by-case basis. Projects within categories (1) through (4) may be considered for loan funding. After cost-share for grant funding has been determined, the local sponsor may be considered for loan funding in addition to the grant funding. The combination of grant and loan funding will not exceed 80 percent from the State Water Commission.

(1) In most cases a 75% cost-share is intended to address improvements to meet primary drinking water standards or expansion into new rural water service areas. Factors considered include:

- (a) Connection of communities to the regional system as part of this expansion as determined by the Chief Engineer.
- (b) Willingness of water users at far reaches of the system to pay additional costs for water service as an indicator of greater need for access to water and local commitment in the project as determined by the Chief Engineer.
- (c) Affordable and sustainable water rate as determined by the Chief Engineer.

Deleted: for higher cost share are

Lower rates of cost-share up to 60% may be made available to address other necessary improvements in rural water systems.

- (2) Supports improvements and connection of new customers within the existing service area of a municipal water system. Population growth and affordability may be used in prioritizing projects in this category.
- (3) Water treatment improvements that address impacts from other State Water Commission projects. Grant funding is based on level of impact as determined by the State Water Commission.
- (4) Addresses extraordinary repairs or replacement needs of a water supply system due to damages from a recent natural disaster.



Debt per capita, either actual or anticipated, may be used as an additional determinant of financial need.

Water Depots for industrial use receiving water from facilities constructed using State Water Commission funding or loans have the following additional requirements:

- a) Domestic water supply has priority over industrial water supply in times of shortage. This must be explicit in the water service contracts with industrial users.
  - b) If water service will be contracted, public notice of availability of water service contracts is required when the depot becomes operational.
  - c) A portion of the water supply at any depot must be available on a non-contracted basis for public access.
- 2 **MUNICIPAL, RURAL, AND INDUSTRIAL WATER SUPPLY PROGRAM.** The Municipal, Rural, and Industrial Water Supply Program, which uses federal funds, is administered according to North Dakota Administrative Code Article 89-12.
  - 3 **DROUGHT DISASTER LIVESTOCK WATER SUPPLY PROJECT ASSISTANCE PROGRAM.** This program is to provide assistance with water supply for livestock impacted during drought declarations and is administered according to North Dakota Administrative Code Article 89-11.

C. **FLOOD CONTROL.** The State Water Commission may provide cost-share for eligible items of flood control projects protecting communities from flooding and may include the repair of dams that provide a flood control benefit.

- 1 **FLOOD RECOVERY PROPERTY ACQUISITION GRANT PROGRAM.** This program is used to assist local sponsors with flood recovery expenses that provide long term flood damage reduction benefits through purchase and removal of structures in areas where flood damage has occurred. All contracted costs directly associated with the acquisition will be considered eligible for cost-share. Contracted costs may include: appraisals, legal fees (title and abstract search or update, etc.), property survey, closing costs, hazardous materials abatement needs (asbestos, lead paint, etc.), and site restoration.

The State Water Commission may provide cost-share of the eligible costs of approved flood recovery expenses that provide long term flood reduction benefits based on the following criteria and priority order:

- a) Local Sponsor has flood damage and property may be needed for construction of temporary or long-term flood control projects, may be cost-shared up to 75 percent.

- b) Local Sponsor has flood damage and property would increase conveyance or provide other flood control benefits, may be cost-shared up to 60 percent.

Prior to applying for assistance, the local sponsor must adopt and provide to the Chief Engineer an acquisition plan (similar to plans required by Hazard Mitigation Grant Program (HMGP)) that includes the description and map of properties to be acquired, the estimated cost of property acquisition including contract costs, removal of structures, the benefit of acquiring the properties, and information regarding the ineligibility for HMGP funding. Property eligible for HMGP funding is not eligible for this program. The acquisition plan must also include a description of how the local sponsor will insure there is not a duplication of benefits.

Over the long-term development of a flood control project following a voluntary acquisition program, the local sponsor's governing body must officially adopt a flood risk reduction plan or proposal including the flow to be mitigated. The flow used to develop the flood risk reduction plan must be included in zoning discussions to limit new development on other flood-prone property. An excerpt of the meeting minutes documenting the local sponsor's official action must be provided to the Chief Engineer.

Local sponsor must fund the local share for acquisitions; this requirement will not be waived. Federal funds are considered "local" for this program if they are entirely under the authority and control of the local sponsor.

The local sponsor must include a perpetual restrictive covenant similar to the restrictions required by the federal HMGP funding with the additional exceptions being that the property may be utilized for flood control structures and related infrastructure, paved surfaces, and bridges. These covenants must be recorded either in the deed or in a restrictive covenant that would apply to multiple deeds.

The local sponsor must provide justification, acceptable to the Chief Engineer, describing the property's ineligibility to receive federal HMGP funding. This is not meant to require submission and rejection by the federal government, but rather an explanation of why the property would not be eligible for federal funding. Example explanations include: permanent flood control structures may be built on the property; project will not achieve required benefit-cost analysis to support HMGP eligibility; or lack of available HMGP funding. If inability to receive federal funding is not shown to the satisfaction of the Chief Engineer, following consultation with the North Dakota Department of Emergency Services, the cost-share application will be returned to the local sponsor for submittal for federal funding prior to use of these funds.

- 2 **FLOOD PROTECTION PROGRAM.** This program supports local sponsor efforts to prevent future property damage due to flood events. The State Water Commission may provide cost-share grants for up to 60 percent of eligible costs. For projects with federal participation, the cost-share may be up to 50 percent of eligible costs.

The cost-share application must include the return interval or design flow for which the structure will provide protection. Local share must be provided on a timely basis. The State Water Commission may lend a portion of the local share based on demonstrated financial need.

Property acquisition costs limited to the purchase price of the property that is not eligible for HMGP funding and within the footprint of a project may be eligible under this program. The local sponsor must include a perpetual restrictive covenant on any properties purchased under this program similar to the restrictions required by the federal HMGP funding with the additional exceptions being that the property may be utilized for flood control structures and related infrastructure, paved surfaces, and bridges. These covenants must be recorded either in the deed or in a restrictive covenant that would apply to multiple deeds.

- 3 **FEMA LEVEE SYSTEM ACCREDITATION PROGRAM.** The State Water Commission may provide cost-share up to 60 percent for eligible services for FEMA 44 CFR 65.10 flood control or reduction levee system certification analysis. The analysis is required for FEMA to accredit the levee system for flood insurance mapping purposes. Typical eligible costs include site visits and field surveys to include travel expenses, hydraulic evaluations, closure evaluations, geotechnical evaluations, embankment protection, soils investigations, interior drainage evaluations, internal drainage hydrology and hydraulic reports, system modifications, break-out flows and all other engineering services required by FEMA. The analysis will result in a comprehensive report to be submitted to FEMA and the Chief Engineer.

Administrative costs to gather existing information or to recreate required documents, maintenance and operations plans and updates, and emergency warning systems implementation are not eligible.

- 4 **DAM SAFETY AND EMERGENCY ACTION PLANS.** The State Water Commission supports dam safety including repairs and removals, as well as emergency action plans. The State Water Commission may provide cost-share for up to 75 percent of the eligible items for dam safety repair projects and dam breach or removal projects. Dam safety repair projects that are funded with federal or other agency funds may be cost-shared up to 75 percent of the eligible non-matched costs. The intent of these projects is to return the dam to a state of being safe from the condition of failure, damage, error, accidents, harm or other events that are considered non-desirable. The State Water Commission may lend a portion of the local share based on demonstrated financial need.

The State Water Commission may provide cost-share up to 80 percent, for emergency action plans (EAPs) of each dam classified as high or medium significant hazard. The cost of a dam break model is only eligible for reimbursement for dams classified as a high hazard.

- 5 **WATER RETENTION PROJECTS.** The goal of water retention projects is to reduce flood damages by storing floodwater upstream of areas prone to flood

damage. The State Water Commission may provide cost-share up to 60 percent of eligible costs for flood retention projects including purchase price of the property. For projects with federal participation, the cost-share may be up to 50 percent. Water retention structures constructed with State Water Commission cost-share must meet state dam safety requirements, including the potential of cascade failure. A hydrologic analysis including the operation plan, quantifying the flood reduction benefits for 25, 50, and 100-year events must be submitted with the cost-share application.

- 6 **SNAGGING AND CLEARING PROJECTS.** Snagging and clearing projects consist of the removal and disposal of fallen trees and associated debris encountered within or along the channel. Snagging and clearing projects are intended to prevent damage to structures such as bridges, and maintain the hydraulic capacity of the channel during flood flows. The State Water Commission may provide cost-share for up to 50 percent of the eligible items for snagging and clearing as well as any sediment that has accumulated in the immediate vicinity of snags and any trees in imminent danger of falling in the channel on watercourses as defined in N.D.C.C. § 61-01-06. Items that are not eligible include snagging and clearing of man-made channels; the dredging of watercourses for sediment removal; the clearing and grubbing of cattails and other plant vegetation; or the removal of any other unwanted materials.

- D. **RURAL FLOOD CONTROL.** The primary purpose of rural flood control projects is to manage runoff or drainage from agricultural sources or to provide flood control in a rural setting. Typically, rural flood control projects consist of drains, channels, diversion ditches, or ring dikes. Items that are not eligible include projects that are managing runoff or drainage from residential or urban sources.

- 1 **DRAINS, CHANNELS, OR DIVERSION PROJECTS.** These projects are intended to improve the drainage and management of runoff from agricultural sources. The State Water Commission may provide cost-share up to 45 percent of the eligible items for the construction of drains, channels, or diversion ditches. Expansions and improvements may be cost-shared on the basis of increased drainage capacity achieved or increased area served. Construction costs for public road crossings that are integral to the project are eligible for cost-share as defined in N.D.C.C. § 61-21-31 and 61-21-32. If an assessment-based rural flood control project involves multiple districts, each district involved must join in the cost-share application.

Cost-share applications for rural assessment drains will only be processed after the assessment vote has passed, the final design is complete, and a drain permit has been obtained. If the local sponsor wishes to submit a cost-share application prior to completion of the aforementioned steps, a pre-application process will be followed.

- 2 **RING DIKE PROGRAM.** This program is intended to protect individual rural homes and farmsteads through ring dike programs established by water resource districts. All ring dikes within the program are subject to the Commission's Individual Rural and Farmstead Ring Dike Criteria provided in Attachment A.



Cost-share is limited to \$40,000 per ring dike. Protection of a city, community or development area does not fall under this program, but may be eligible for the flood control program. The State Water Commission may provide up to 60 percent cost-share of eligible items for ring dikes.

Landowners enrolled in the Natural Resource Conservation Service's (NRCS) Environmental Quality Incentive Program (EQIP) who intend to construct rural or farmstead ring dikes that meet the State Water Commission's elevation design criteria are eligible for a cost-share reimbursement of 20 percent of the NRCS construction payment, limited to a combined NRCS and State Water Commission contribution of 80 percent of project costs.

- E. **RECREATION.** The State Water Commission may provide cost-share up to 40 percent for projects intended to provide water-based recreation. Typical projects provide or complement water-based recreation associated with dams.
- F. **IRRIGATION.** The State Water Commission may provide cost-share for up to 50 percent of the eligible items for irrigation projects. The items eligible for cost-share are those associated with new central supply works, including water storage facilities, intake structures, wells, pumps, power units, primary water conveyance facilities, and electrical transmission and control facilities.
- G. **BANK STABILIZATION.** The State Water Commission may provide cost-share up to 50 percent of eligible items for bank stabilization projects on public lands or those lands under easement by federal, state, or political subdivisions. Bank stabilization projects are intended to stabilize the banks of lakes or watercourses, as defined in N.D.C.C. § 61-01-06, with the purpose of protecting public facilities. Drop structures and outlets are not considered for funding as bank stabilization projects, but may be eligible under other cost-share program categories. Bank stabilization projects typically consist of a rock or vegetative design and are intended to prevent damage to public facilities including utilities, roads, or buildings adjacent to a lake or watercourse.

**ATTACHMENT A**  
**INDIVIDUAL RURAL AND FARMSTEAD RING DIKE CRITERIA**

**MINIMUM DESIGN CRITERIA**

- **HEIGHT:** The dike must be built to an elevation 2 ft above either the 100-year flood or the documented high water mark of a flood event of greater magnitude, whichever is greater.
- **TOP WIDTH:** If dike height is 5 ft or less: 4 ft top width  
If dike height is between 5 ft and 14 ft: 6 ft top width  
If dike height is greater than 14 ft: 8 ft top width
- **SIDE SLOPES:** 3 horizontal to 1 vertical
- **STRIP TOPSOIL AND VEGETATION:** 1 ft
- **ADEQUATE EMBANKMENT COMPACTION:** Fill in 6-8 inch layers, compact with passes of equipment
- **SPREAD TOPSOIL AND SEED ON RING DIKE**

**LANDOWNER RESPONSIBILITY**

Landowners are responsible to address internal drainage on ring dikes. If culverts and flap gates are installed, these costs are eligible for cost-share. The landowner has the option of completing the work or hiring a contractor to complete the work.

**If contractor does the work,** payment is for actual costs with documented receipts.

**If landowner does the work,** payment is based on the following unit prices:

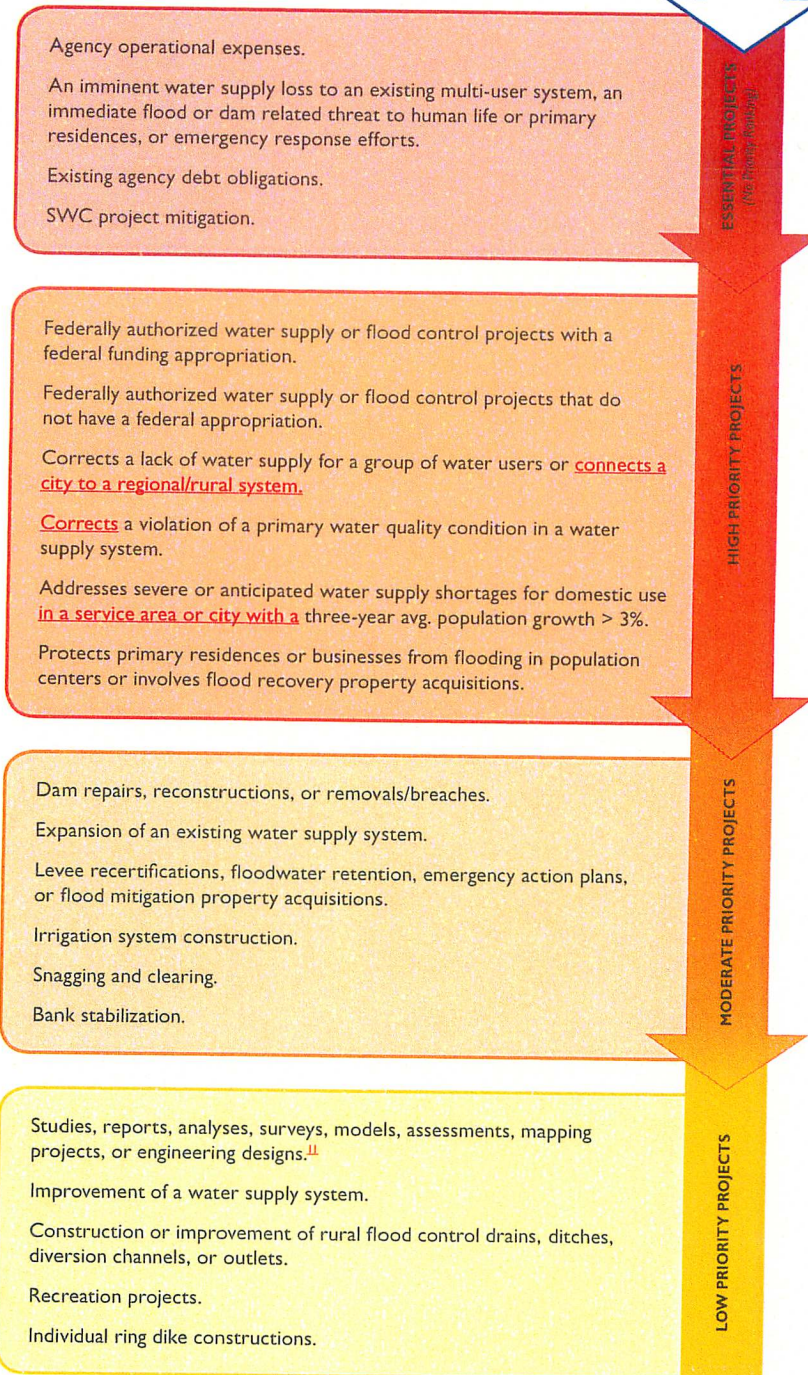
- **STRIPPING, SPREADING TOPSOIL, AND EMBANKMENT FILL:** Chief Engineer will determine rate schedule based on current local rates
- **SEEDING:** Cost of seed times 200%
- **CULVERTS:** Cost of culverts times 150%
- **FLAP GATES:** Cost of flap gates times 150%

**OTHER FACTS AND CRITERIA**

- The topsoil and embankment quantities will be estimated based on dike dimensions. Construction costs in excess of the 3:1 side slope standard will be the responsibility of the landowner. Invoices will be used for the cost of seed, culverts, and flap gates.
- Height can be determined by existing FIRM data or known elevations available at county floodplain management offices. Engineers or surveyors may also assist in establishing height elevations.
- The projects will not require extensive engineering design or extensive cross sections.
- A dike permit is required if the interior volume of the dike consists of 50 acre-feet, or more.

# SWC ~~WATER~~ PROJECT PRIORITIZATION GUIDANCE ~~CONCEPT~~

Projects submitted during the project planning inventory process<sup>I</sup> that meet SWC cost-share eligibility requirements will be considered for prioritization. Projects that do not meet local cost-share match requirements, (per SWC cost-share policies), will be dropped to the next lowest priority category. Ineligible projects will be diverted toward alternative funding sources.



## Footnotes

I. All local sponsors are encouraged to submit project and study financial needs during the budgeting process. Projects and studies not submitted as part of the project information collection effort may be held until action can be taken on those that were included during budgeting, unless determined to be an emergency that directly impacts human health and safety or that are a direct result of a natural disaster.

II. May be considered as a higher priority if the related project is of higher priority.

## Disclaimer

This process is meant to provide guidance for prioritizing water projects during the budgeting process that may be eligible for cost-share assistance through the State Water Commission. Interpretation and deviations from the process are within the discretion of the state as authorized by the State Water Commission or Legislature.